Photo by Kelvin Daniels

Loblolly pines, in a stand owned by S. H. Summerhill in Bullock County, illustrate a symptom of beetle infestation.

What's Wrong with My Pine Trees? It's the Ips Engraver Beetle!

By *Dana McReynolds*, Forest Health, Alabama Forestry Commission

You received an information packet in the mail from the Alabama Forestry Commission stating that you have beetles on your property. The immediate conclusion is that these beetle infestations are from southern pine beetles. The next response is most likely how to find a method of controlling or eradicating them.

Generally, most beetle infestations *do* result from southern pine beetles, but this year there was a slight deviation from the typical situation. Many infestations, especially detected spots in the southern part of the state, are actually the **Ips engraver beetle.**

Throughout each year, the Alabama Forestry Commission conducts different types of detection flights. For southern pine beetle infestation, four aerial detection flights are completed – one in each region. From these flights, county AFC personnel compile data and maps and send an information packet to the appropriate landowner. Ordinarily, most landowners would assume that the dying pine trees are infested with southern pine beetles. However, given the weather occurrences in 2005 and the drought situation from this year, the beetle culprit is most likely the Ips engraver beetle.

Photo by Gerald J. Lenhard, www.forestryimages.org

An adult ***Ips grandicollis***

At the end of August 2005, Hurricane Katrina devastated the areas around the Gulf of Mexico, especially in Louisiana and Mississippi. Alabama, however, also received damage. Besides the obvious destruction of property, parts of the state

(Continued on page 10)

Above: These pines infested with Ips beetles show no symptoms of infestation except for the browning of the needles. There are no visible pitch tubes.

Photos by Kelvin Daniels

also experienced vegetation damage. In addition to broken limbs and shaken roots, trees in Mobile and Baldwin counties were also stressed from salt deposits, made by salt water from the storm surge and strong winds. By early spring 2006, many of these trees naturally recovered from the effects of Katrina. However, during late spring, some pines in these areas started showing visual signs of infestation.

The symptoms of an Ips engraver beetle infestation are quite similar to the ones of the southern pine beetle and the black turpentine beetle. Pitch tubes, approximately the size of a dime, will seep from the boring holes in the bark. The Ips pitch tubes, however, are generally smaller in size than those created by the other two beetles. Also, these pitch tubes are pink to reddish-brown and are usually located in the upper portion of the tree's bole. The needles will turn yellow, then red, and finally brown. The feeding galleries are small narrow Y and H shaped lines in the inner bark.

The Ips engraver beetle usually infests only a few pines, not causing significant loss to a stand. They rarely spread to neighboring pines. However, 2006 has not proven a typical example of Ips engraver beetle infestation. This year, many pines in a contiguous area were infested and died. This insect generally attacks severely stressed and injured trees, making pines in southern Alabama more susceptible. The drought that per-

A loblolly pine with pitch tubes visible on the bole.


Photo by Kelvin Daniels

Above: Landowner Summerhill and AFC County Manager William Clem take a look at the gallery patterns in the inner bark of an infested pine.


Photo by Kelvin Daniels

Right and below: The small Y and H gallery patterns in the inner bark created by the Ips engraver beetle.

sisted from April throughout the summer created an additional stress factor. For most of the pines infested with this beetle, there were no visible pitch tubes. The drought created a situation where the pines did not produce a lot of sap, therefore, not exuding pitch tubes. The main symptom of infestation was the browning of the needles.

The method of controlling or eradicating beetle infestation is to either salvage the pines and harvest a buffer around the infestation, or treat the pines with a recommended insecticide. With the recent increase in rainfall, perhaps some of the stress will be relieved.

The best solution to prevent or reduce the chance of beetle infestation is to maintain a healthy tree. For pines in residential areas, water them thoroughly once a week during a drought period. In a forest stand, mature pines generally keep their vigor when the basal area is approximately 70 to 100 square feet.

For more information about the Ips engraver beetle and related management recommendations, go to the Commission's website: **www.forestry.state.al.us**, select *Forest Management*, then scroll to *Forest Management Information Sheets*. Also, you may contact your local Alabama Forestry Commission office for assistance or information.


Photo by Michael Kyser